

Abstract

The present invention relates to a pattern generating apparatus for writing a pattern on a surface of an object, comprising: a stage having an object having a thickness (T) being provided with a surface, said surface being divided into a number of measurement points, where two adjacent measurement points being spaced a distance apart not exceeding a predetermined maximum distance; means to determine the gradient of the surface at each measurement point; means to calculate a 2-dimensional local offset (d) in the x-y plane for each measurement point as a function of the gradient, and the thickness (T) of object; and means to correct the pattern to be written on said surface by using the 2-dimensional local offset (d). The invention also relates to an apparatus for measuring the physical properties of a surface.